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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,290	08/24/2000	Hiroyuki Maeda	OPS Case 500	5582

7590 05/23/2002

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EXAMINER

BROADHEAD, BRIAN J

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 05/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,290

Applicant(s)

MAEDA, HIROYUKI

Examiner

Brian J. Broadhead

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5, 8, 9 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 23 April 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3-5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over James, 5420794, in view of the admitted prior art, and in further view of Tognazzini, 5771484.

3. James discloses a transmitter provided on a road for transmitting a signal formed of an electromagnetic wave on lines 15-18, on column 2; the automatic braking device and a receiver being provided in a vehicle wherein the braking device drives a pump in order to operate an automatic brake to wheel brake provided in a pair of right and left front wheels or rear wheels on lines 25-28, on column 2, the brakes are a hydraulic and it is inherent that there is some type of pump connected to operate the brakes automatically; the receiver outputting a control signal based on the signal transmitted by the transmitter on lines 52-61, on column 5; the automatic braking device is operated based on the control signals on lines 35-43, on column 5; the automatic braking device is operated based on a reference value corresponding to a target traveling speed set by the reference value setting means based on the control signal on lines 45-52, on column 7; there is a vehicle speed detection means on lines 12-25, on column 6; a temperature detection means on the road for detecting the atmospheric temperature

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reaches a given temperature and outputting a temperature signal that is transmitted to the vehicle on lines 35-50, on column 6, weather and road conditions would include temperature; and an alarm is given to the inside of the vehicle based on the control signal outputted by the receiver on lines 53-67, on column 6. James does not disclose that the brakes are anti-lock brakes, or that there are detectors directly on the side of the road. It is admitted by the applicant that in the prior art there has been proposed an automatic braking device for operating a brake automatically to a vehicle regardless of intention of a driver and that an automatic braking device of this type can be structured on the basis of a conventional antilock brake control device on lines 14-18, on page 1 of the specification. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use anti-lock brakes in the invention of James because anti-lock brakes are known to offer superior control by preventing wheel lockup and they are becoming standard equipment on vehicles. Tognazzini teaches of a vehicle control system wherein there are detectors directly on the roadside on lines 28-37, on column 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the roadside detectors of Tognazzini in the invention of James and the admitted prior art because such modification would provide the best detection of actual road conditions for which the vehicle is traveling on.

1. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over James, 5420794, in view of the admitted prior art, and in view of Tognazzini, 5771484 as applied to claim 12 above, and further in view of Cooper, 5786750.

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2. James, the applicant, and Tognazzini disclose the limitations as set forth above. They do not disclose that the temperature sensor detects when the atmospheric temperature reaches a given temperature indicating a danger state that the detection means outputs a signal or that the temperature detection is in a vehicle tunnel. Cooper teaches of detectors that detect when the atmospheric temperature reaches a given temperature indicating a danger state that the detection means outputs a signal or that the temperature detection is in a vehicle tunnel on lines 55-66, on column 1, lines 45-55, on column 2, and lines 4-8, on column 7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the detectors of James, the applicant, and Tognazzini the fire detection of Cooper because the goal of Tognazzini is to protect the vehicle from road hazards and fire would be a serious road hazard.

Allowable Subject Matter

3. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record is silent on where to best position the transmitter in relations to a tunnel.

Response to Arguments

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5. Applicant's arguments with respect to claims 3-5 and 8-10 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 3-6-02 have been fully considered but they are not persuasive. Tognazzini has been cited to address the argument concerning the disclosure of detectors on the roadside. Tognazzini also just transmits the danger warning and the vehicle is left to do the determination of the response to the warning and to set a target vehicle speed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 703-308-9033. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

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BJB

May 20, 2002

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